

**REMARKS**

The Office Action mailed December 1, 2005 has been carefully reviewed and the foregoing amendments have been made in consequence thereof.

Claims 1, 2, and 4-18 are now pending in this application. Claims 1, 2, and 4-18 stand rejected.

Regarding the previous objections to the drawings under 37 C.F.R. 1.84(p), Applicant has previously amended Figure 5 to remove the reference numbers 100, 102, and 104. However, as pointed out by the Examiner, Applicant has not provided a replacement sheet including such amendments to Figure 5. Accordingly, a replacement sheet including Figure 5 and the above-referenced amendments thereto is enclosed herewith to replace the original drawing sheet which included Figure 5. No new matter has been added.

The objection to the drawings under 37 C.F.R. 1.83(a) is respectfully traversed. More specifically, a “spring” is defined as “an elastic body or device that recovers its original shape when released after being distorted” (Merriam-Webster Online Dictionary). Any of the guide wire bodies 44 shown in Figures 2-6 could, in some embodiments, be a spring as defined above. As such, Applicant submits that “a spring extending between said first and second ends”, as recited in Claim 8, is shown in the drawings and the drawings therefore satisfy the requirements of 37 C.F.R. 1.83(a). For at least the reasons set forth above, Applicant respectfully requests the objection to the drawings under 37 C.F.R. 1.83(a) be withdrawn.

The objection to the specification is respectfully traversed. More specifically, in the Amendment of March 29, 2005, Applicant inadvertently replaced paragraph [0024] with a duplicate of paragraph [0025]. The specification has been amended herein to replace the duplicated paragraph [0025] with a paragraph that is substantially similar to paragraph [0024] as originally filed in the above-referenced non-provisional patent application filed on January 29, 2004. No new matter has been added. Accordingly, for at least the reasons set forth above, Applicant respectfully requests the objections to the specification be withdrawn.

The rejection of Claims 1, 2, 4-6, 9, 11-14, and 16-18 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,187,610 (Ziegler) is respectfully traversed.

Ziegler describes a ligation chain (10) that is formed from a continuous wire such that a loop (12) is formed on a first end of the chain, and a plurality of eyelets (14) extend from the loop to a second end (13) of the chain. More specifically, the ligation chain is braided such that at least four or more tight twists (15a) are formed between adjacent eyelets.

Claim 1 recites an apparatus for facilitating treatment of a tooth that is at least partially impacted, wherein the apparatus comprises “a wire comprising a first end, a second end, and a substantially planar body extending therebetween, said body comprising a substantially planar surface....”

Ziegler does not describe nor suggest an apparatus as recited in Claim 1. For example, Ziegler does not describe nor suggest an apparatus including a wire having a substantially planar body extending between a pair of ends, wherein the body includes a substantially planar surface. Rather, in contrast to the present invention, Ziegler describes a ligation chain that includes an annular cross-sectional shape and therefore does not include a substantially planar surface. Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over Ziegler.

Claims 2, 4-6, and 9 depend from independent Claim 1. When the recitations of Claims 2, 4-6, and 9 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 2, 4-6, and 9, for at least this reason, are likewise patentable over Ziegler.

Claim 11 recites a method for treating a tooth that is at least partially impacted. The method comprises “coupling a first end of a wire to an impacted tooth, the wire having a substantially planar body extending between the first end and a second end, wherein the body includes a substantially planar surface....”

Ziegler does not describe nor suggest a method as recited in Claim 11. For example, Ziegler does not describe nor suggest a method including coupling a first end of a wire to an impacted tooth, wherein the wire has a substantially planar body extending between its ends, and wherein the body includes a substantially planar surface. Rather, in contrast to the present invention, Ziegler describes a ligation chain that includes an annular cross-sectional shape and therefore does not include a substantially planar surface. Accordingly, for at least the reasons set forth above, Claim 11 is submitted to be patentable over Ziegler.

Claims 12-14 and 16-18 depend from independent Claim 11. When the recitations of Claims 12-14 and 16-18 are considered in combination with the recitations of Claim 11, Applicant submits that dependent Claims 12-14 and 16-18 likewise are patentable over Ziegler.

For at least the reasons set forth above, Applicant respectfully requests the Section 102 rejection of Claims 1, 2, 4-6, 9, 11-14, and 16-18 be withdrawn.

The rejection of Claims 7, 10, and 15 under 35 U.S.C. § 103 as being unpatentable over Ziegler in view of U.S. Pat. No. 5,312,247 (Sachdeva) is respectfully traversed.

Ziegler is described above.

Sachdeva describes an orthodontic appliance (10) used to move at least two teeth to desired positions and/or to expand a patient's midpalatal suture. The appliance includes a trans-palatal arch bar (14) that includes terminal ends (16) that are embedded in teeth-abutting members (18). The teeth-abutting members apply corrective forces induced by the arch bar to several teeth on opposite sides of the same patient's dental arch. As such, Sachdeva do not describe nor suggest a wire that induces an eruptive force or that facilitates treatment of a tooth that is at least partially impacted.

Applicant respectfully submits that the Section 103 rejection of Claims 7, 10, and 15 as being unpatentable over Ziegler in view of Sachdeva is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to

produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. In contrast to the assertion within the Office Action, Applicant respectfully submits that it would not be obvious to one skilled in the art to combine Ziegler with Sachdeva et al. because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicant's own teaching. Rather, only the conclusory statement that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Ziegler with the wire of superelastic material of Sachdeva et al. in order to use a force supplying wire that can be easily shaped or manipulated for placement by the practitioner in view of Sachdeva et al." suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levingood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicant's disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Moreover, as is well established, the mere fact that the prior art structure could be modified does not make such a modification obvious unless the prior art suggests the desirability of doing so. See In re Gordon, 221 U.S.P.Q.2d 1125 (Fed. Cir. 1984). Furthermore, the Federal Circuit has determined that:

[i]t is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention."

In re Fitch, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

Further, under Section 103, “it is impermissible...to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.” In re Wesslau, 147 USPQ 391, 393 (CCPA 1965). Rather, there must be some suggestion, outside of Applicants’ disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant’s disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the cited art, nor any reasonable expectation of success has been shown. For example, there is no suggestions or motivation within either Ziegler or Sachdeva to replace the ligation chain of Ziegler that has a circular cross-sectional shape with the arch bar member of Sachdeva, which in Figure 5 appears to have a rectangular cross-sectional shape. Moreover, it appears that Ziegler teaches away from such a combination because Ziegler describes twisting the ligation chain (Col. 3 at lines 15-52) and the rectangular cross-sectional shape of Sachdeva’s arch bar member may be more difficult to twist. Accordingly, since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicant requests that the Section 103 rejection of Claims 7, 10. and 15 be withdrawn.

Moreover, if art “teaches away” from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited art, as a whole, is not suggestive of the presently claimed invention. Specifically, Applicant respectfully submits that Sachdeva and Ziegler teach away from the present invention, and as such, there is no suggestion or motivation to combine Ziegler with Sachdeva. Specifically, in contrast to the present invention, Ziegler describes a ligation chain having a circular cross-sectional shape and configured to be coupled between an impacted tooth and a bracket or arch wire in a patient’s mouth to

facilitate erupting the impacted tooth, and in contrast to Ziegler and the present invention, Sachdeva describes a wire that is coupled between teeth on opposite sides of a patient's mouth. Accordingly, Ziegler and Sachdeva teach away from the present invention, and from each other, and as such, any combination of the cited art appears to support the nonobviousness of the present invention.

Accordingly, for at least the reasons set forth above, Applicant respectfully requests the Section 103 rejection of Claims 7, 10, and 15 as being unpatentable over Ziegler in view of Sachdeva be withdrawn.

The rejection of Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Ziegler in is respectfully traversed.

Ziegler is described above.

Applicants respectfully submit that the Section 103 rejection of Claim 8 is not a proper rejection. As is well established, the mere assertion that it would have been obvious to one of ordinary skill in the art to have modified Ziegler to obtain the claimed recitations of the present invention does not support a *prima facia* obvious rejection. Rather, each allegation of what would have been an obvious matter of design choice must always be supported by citation to some reference work recognized as standard in the pertinent art and the Applicant given the opportunity to challenge the correctness of the assertion or the notoriety or repute of the cited reference. Applicant has not been provided with the citation to any reference supporting the combination made in the rejection. The rejection, therefore, fails to provide the Applicant with a fair opportunity to respond to the rejection, and fails to provide the Applicant with the opportunity to challenge the correctness of the rejection.

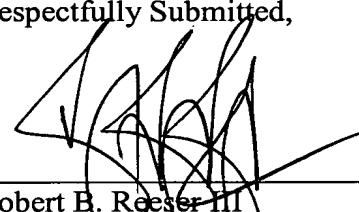
Moreover, Claim 8 depends from independent Claim 1, which is recited above. As discussed above, Ziegler does not describe nor suggest an apparatus as recited in Claim 1. For example, Ziegler does not describe nor suggest an apparatus including a wire having a substantially planar body extending between a pair of ends, wherein the body includes a substantially planar surface. Rather, in contrast to the present invention, Ziegler describes a

ligation chain that includes an annular cross-sectional shape and therefore does not include a substantially planar surface. Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over Ziegler.

Claim 8 depends from independent Claim 1. When the recitations of Claim 8 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claim 8, for at least this reason, is likewise patentable over Ziegler.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

  
\_\_\_\_\_  
Robert B. Reeser, III  
Registration No. 45,548  
ARMSTRONG TEASDALE LLP  
One Metropolitan Square, Suite 2600  
St. Louis, Missouri 63102-2740  
(314) 621-5070